

SIGMA XI QUARTERLY

Vol. XIII

JUNE, 1925

No. 2



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DAVID STARR JORDAN.....	Cornell '87, Stanford University
THOMAS W. BARRALLY.....	Union '87, Tonawanda, N. Y.
PAUL B. MAGNUSON.....	Penn. '08, Chicago

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Gift
Prof. E. C. Case
5-9-24

SIGMA XI QUARTERLY

EDITORIAL COMMITTEE

FLOYD KARKER RICHTMYER
EDWIN EMERY SLOSSON

HENRY BALDWIN WARD
EDWARD ELLERY

VOL. XIII

JUNE, 1925

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EDITORIALS

We welcome to our group of chapters the California Institute of Technology, the forty-third chapter of Sigma Xi. The new chapter was installed by President Richtmyer April 2, and the attention of Sigma Xi members everywhere is especially called to the account of the installation given in this number of the Quarterly.

In its thirty-nine years of existence Sigma Xi has expanded not only in the number of chapters, which now include most of the prominent educational and research institutions in this country, but also in position and influence. All the national officers of the society are conscious of the responsibility resting upon them to bring about a full expression of the great powers that are inherent in an organization of twenty thousand members, all of whom are presumably interested in the expanse of human knowledge. Chapter members everywhere are urged to keep in mind the character of the Society of the Sigma Xi as an international organization, and to think of themselves always as units of a very large and important body.

* * * * *

Following the dinner of New York Alumni held last November, an account of which appeared in the December, 1924 number of the Quarterly, the alumni resident in the vicinity of Spokane, Washington, held a meeting in April. We are glad to print the brief account of this meeting sent to us by Mr. I. T. Johnsrud, an alumnus of the University of Minnesota Chapter and now head of the department of physics in the Lewis and Clark High School of Spokane.

The newly organized Alumni Committee, of which Mr. C. E. Davies of New York is the energetic chairman, is at work upon a scheme to bring about alumni gatherings in various centers through-

out the country. Mr. Davies will be glad to receive suggestions and assistance in this movement. He may be reached at the address given in the list of officers.

* * * * *

The congratulations of the entire organization are extended to the Virginia Chapter, one of our youngest groups and the only one, we believe, which has been enabled to offer a prize for successful research. Members will read with interest and enthusiasm the account of the Research Prize at the University of Virginia which is included in this issue.

* * * * *

The Committee on Sigma Xi Aid to Research makes its report in this issue. It is important and interesting. The aid awarded reaches different fields and a variety of activities. Our appreciation is extended to the members of the committee who have been of inestimable help in awarding the sum of money made available by the Sigma Xi Alumni under the supervision of the Executive Committee.

* * * * *

As a result of circular letters sent to chapter secretaries asking for the sentiments of the chapters regarding the appointment of an authorized jeweler and the distribution of Sigma Xi membership keys and associate emblems through one central office, the following figures tell their own story:

Number of letters sent out.....	42
Number of replies.....	19
Number in favor of an authorized jeweler and distribution through a central office.....	18

This report will be made at the Kansas City Convention and definite action will be asked at that time.

* * * * *

The office of the national secretary needs PERMANENT or home addresses of newly elected members and associates. The secretary realizes that the present record cards do not make clear that such addresses are desired and necessary. A new set of cards will shortly be prepared and issued, but until that time will all chapter secretaries include in the data asked for by the present record cards, a permanent or home address of new members and associates.

MINUTES OF THE EXECUTIVE COMMITTEE MEETING

NEW YORK, MAY 2, 3, 1925

The spring meeting of the Executive Committee of Sigma Xi was held in the Engineering Societies Building, New York City, May 2 and 3, 1925. Present were: President Richtmyer, Dean Ellery, Dean Pegram, Professor Stewart, Professor McClung, Dr. Kellogg, Professor Ward, Dr. Durand, Mr. Davies, Chairman of the Alumni Committee and Dr. Utley, a member of the Alumni Committee.

The Committee on Conventions (Richtmyer and Ellery) reported that Dr. William M. Jardine, Secretary of Agriculture, had accepted the invitation of the committee to be the speaker at the fourth joint meeting of the American Association for the Advancement of Science and Sigma Xi to be held in Kansas City, Tuesday, December 29, 1925. The committee reported that the selection of Secretary Jardine was approved by the Executive Committee of the American Association.

The secretary reported that the Sigma Xi alumni of the Northwest met for a Sigma Xi breakfast in Spokane, April 11, with twenty-one present.

The secretary reported that the alumni offices of institutions where Sigma Xi chapters are located had generously co-operated with his office in correcting address lists of Sigma Xi alumni.

Dr. William W. Root, Secretary of the Alpha Omega Alpha Honorary Medical Fraternity, who was present on invitation, spoke to the committee on the methods of financing the organization which he represented, and presented the suggestion that a conference of delegates from honorary fraternities might result in advantage to all. The Executive Committee voted that the president and secretary, or one of them, be empowered to co-operate with honorary societies in arranging for a conference and to attend such conference.

The committee expressed its opinion that just as far as it is possible there should be kept on file in the office of the national secretary a printed or typewritten statement of research work in progress at the various institutions where there are Sigma Xi chapters.

President Richtmyer reported that the chapter at the California

Institute of Technology had been installed by him April 2. This constitutes the forty-third chapter of Sigma Xi.

Mr. Davies, who had been authorized at the December meeting of the committee to investigate the advantages of incorporation of the society and the necessary steps to such incorporation, reported that he had conferred with the national secretary of Phi Beta Kappa, which had been recently incorporated under the auspices of the Department of Education of the State of New York, and that Sigma Xi could be incorporated in like manner. The committee voted that the president should appoint a committee on incorporation who should report at the December meeting. The president appointed Messrs. Davies, Pegram and Kellogg to act as such committee.

In view of the growth of the society, the consequent increase of necessary work in the secretary's office and the increase in the cost of conducting that office, the committee voted that a motion should be prepared and presented to the members of the committee by mail and, when approved, to the various chapters and finally to the convention, recommending such changes in the present policy of conducting the society's affairs as would promote the interest of the society.

In this connection, the following resolution was adopted:

The Executive Committee believes that at the earliest possible moment a paid assistant secretary be secured who shall devote not less than one-half time to the work of the society.

Mr. Davies, who had been asked by the committee at its December meeting to investigate the wisdom and possibility of organizing alumni centers throughout the country, reported progress. The plan of contributions from the alumni to the society now in partial operation, by which alumni contribute \$3 a year, was approved, and the Alumni Committee was asked to suggest at the next meeting a scheme for the future operation of the plan.

The committee voted that a sub-committee be appointed to consider the policy and organization that would best promote alumni activities in furthering the purposes of the society. The president appointed Davies, McClung and Stewart as sub-committee.

The treasurer and secretary were authorized to perfect a method by which chapter secretaries and treasurers should make their reports of membership and pay their assessments.

The treasurer reported that he had invested \$2000 of the Alumni Fund in bonds, and the committee voted its approval. The com-

MINUTES OF EXECUTIVE COMMITTEE MEETING 49

mittee further referred to the treasurer with power the investment of chapter funds.

The District of Columbia Alumni Chapter had referred to the committee the question of payment of membership dues by the members of that chapter. The committee voted that the annual assessment of \$.75 levied by the convention be applicable to institutional chapters only and authorized the treasurer to adjust the records to this motion.

The printed petition from the group at New York University was presented. The committee voted without dissenting voice to recommend to the next convention that a charter be granted.

It was voted that a committee of three be appointed to make a survey and report on the advisability of extension of the society into other institutions, the committee to consist of the president as chairman, the secretary and the third member to be appointed by the president. The president appointed Dr. Kellogg as the third member.

The secretary was instructed to inform Sigma Xi clubs that clubs have no authority to elect members.

The committee on revision of the procedure in connection with petitions from groups at institutions was asked to make further report in December.

President Richtmyer presented for the consideration of the committee a blank form for summarizing conditions at institutions from which groups of petitioners are contemplating petitioning for a charter. The Executive Committee expressed an appreciation and general approval of this blank form and further consideration of it will be taken up at the December meeting.

Pursuant to a request of the Washington Convention that the Executive Committee be prepared to report at the next convention upon possible ways and means of meeting the increasing expense of conducting the affairs of the Society, the treasurer submitted the following memorandum:

MEMORANDUM OF REPORT FROM EXECUTIVE COMMITTEE TO 1925 CONVENTION ON THE SUBJECT OF INCREASE OF ANNUAL ASSESSMENT

The following report on the subject of the increase of the annual assessment upon the chapters was adopted and ordered transmitted to the 1925 Convention, in response to the request of the 1924 Convention that the Executive Committee consider and report to the 1925 Convention on the subject of an increase in the annual assessment upon the chapters.

The Executive Committee has given careful consideration to this subject and finds that properly to support the activities of the general organization of Sigma Xi, there will be required a larger budget of expenditures than has been possible heretofore. In particular, the work of the secretary's office has, with the growth of the Society and membership and number of chapters, greatly increased in the past few years. While this increase has been coming on, the Society has been taking a larger and larger fraction of the valuable time of its secretary and has been enjoying the generous courtesies of Union College as to office space, office equipment and other assistance. A society of the strength of Sigma Xi cannot afford to continue to have its work carried on this basis. It is clear that better equipment for caring for the records and the regular stated correspondence and other work of the secretary's office must be provided and furthermore, as brought out by resolutions already adopted by the Executive Committee, it will be necessary at the earliest possible moment to employ the paid secretarial services of at least a part time man. The opportunity at the present time of furthering the objects of Sigma Xi is so unusual a one that the Executive Committee has already revised the budget for the present year by the addition of \$1000 to the allowance for the secretary's office.

To meet the needs of the budget, that will be necessary to continue the work of the Society, the Executive Committee is unanimously of the opinion that the annual assessment upon the chapters should be increased from \$.75 to \$1.00 beginning with the 1926 assessment. In this opinion the Executive Committee appears to be supported already by a number of the chapters, since in response to the letter sent out from the secretary's office asking for suggestions as to improvements in the Quarterly and opinion as to the furnishing of all keys and badges through a central office, several chapters volunteered the suggestion that the annual assessment be raised to \$1.00.

May 5, 1925.

The committee voted its approval of this memorandum and further voted that the treasurer be empowered to add \$1500 to the budget item of expenses of the secretary's office, \$1000 of this to be taken from the chapter funds and \$500 from the Alumni Fund.

The evening session of the committee was devoted to a discussion of the possibilities inherent in an organization of the size of Sigma Xi whose members are all presumably interested in the promotion of research. The discussion was led by Dr. Kellogg who presented the situation as follows:

MEMORANDUM FOR EXECUTIVE COMMITTEE OF SIGMA XI
May 2, 1925

With an alumni membership of approximately 15,000 Sigma Xi is an organization of large potentiality in connection with the stimulation and support of scientific research and its applications. The alumni members of Sigma Xi are men and women all of whom were especially interested in scientific work during their undergraduate and graduate university days. Many of them are now

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professional workers in science and technology. Others have maintained an interest in science as laymen. The Sigma Xi alumni therefore compose a large body of men and women with a more or less live interest in the advancement of science and understanding of scientific work. The problem is how may this interest and understanding be taken advantage of for the profit of the further advancement of science in America?

In the special circumstances of the present form of organization of the Sigma Xi Society there are two activities which are the ones logically indicated as those which the alumni members of the Society can most effectively undertake. These are, first, the encouragement of the various chapters of active members by the alumni residing in or near the seats of these active chapters; and, second, the raising of money for the establishment of research professorships, research fellowships, grants for research, etc., either in the form of capital endowment or annual subscription for terms of years.

The recent experience of the Society has shown that it is not impossible to raise some money for the purposes indicated. But it is probable that this sum cannot be a very large one. How can it be made to go as far as possible? It has occurred to me, on the basis of some experience in aiding in the administration of funds available for the support of scientific research, that our Society, in the event that it can raise some money, might advisedly seek to stimulate universities and technical schools in which active Sigma Xi chapters now exist or come into existence to make appropriations for research purposes, by agreeing to meet them half-way. That is, I suggest that we try to make every thousand dollars which we can raise bring out another thousand from some university by co-operating with it in support of research work and workers.

A number of universities already make larger or smaller appropriations from their general funds for the support of research in their respective institutions. Some which do not can be induced to do so by offering to match their appropriations by similar ones from the Society. This principle is one in which most of the gifts of the various Rockefeller boards (Rockefeller Foundation, International Health Board, General Education Board, International Education Board, Laura Spelman Rockefeller Memorial) to universities and colleges are made.

Such a plan of work would, I believe, serve the treble purpose of (a) stimulating the devotion of a certain amount of money from university funds to research purposes; (b) doubling the effect of any money we could raise; and (c) helping us in the raising of money from our alumni, who would, I think, find in such an arrangement, whereby each dollar subscribed for the support of research would mean two dollars spent for such support, an irresistible invitation to subscribe to Sigma Xi aid to research.

The committee was unanimous in the opinion that every effort should be made to organize the alumni for work along the lines suggested by Dr. Kellogg. The secretary and Mr. Davies were empowered to begin this work as soon as possible, starting with the arrangement of membership records now on file in the secretary's office in order that the entire membership of the society might be kept in closer touch with the advance movements of the society.

The committee had as guests during the luncheon hour Dr. Oscar M. Voorhees, National Secretary of Phi Beta Kappa, who told the committee about the national program of Phi Beta Kappa; and Dr. W. W. Root, National Secretary of Alpha Omega Alpha, who spoke again about the work of the organization he represents.

EDWARD ELLERY, *Secretary.*

INSTALLATION AT THE CALIFORNIA INSTITUTE OF TECHNOLOGY, PASADENA, CALIFORNIA

Professor F. K. Richtmyer, National President, Presiding.

Dr. J. C. Shedd, National Secretary, (Pro Tem).

The meeting was called to order by President Richtmyer at 5.45 P.M., April 2, 1925, in Culbertson Auditorium, California Institute of Technology.

The President first outlined the receiving of the petition from the group of Sigma Xi members and research associates in the Institute for the founding of a chapter of Sigma Xi, and announced the action of the Executive Committee taken December 27, 1923 and of the National Convention held in Cincinnati on December 28, 1923, granting a charter as requested with the customary limitations in regard to the election of undergraduates to associate membership only. President Richtmyer then inducted into membership as charter members of the new chapter such of the petitioners as had not already been received into the Sigma Xi fellowship.

President Richtmyer read the charter and outlined the history of Sigma Xi from its founding at Cornell University in 1886 to the present, stating that with the installation of the chapter at California Institute the total number of chapters was now 43.

On motion of Dr. A. A. Noyes, Dr. Robert A. Millikan was chosen as first president of the chapter. National President Richtmyer presented to Dr. Millikan the charter of the chapter and surrendered the chair to the chapter president.

After a few remarks, stating that he had acted for two terms as president of the chapter at the University of Chicago, and was happy to accept the honor of the present election, Dr. Millikan called for nominations for vice-president.

On motion of Professor E. C. Watson, Dr. W. S. Adams of Mount Wilson Observatory was elected vice-president. On motion of Professor W. H. Clapp, Prof. W. N. Lacey of California Institute was elected secretary. On motion of Professor Lacey, Professor E. W. Sorenson was elected treasurer.

After a delightful dinner at the California Institute "Dugout" President Millikan, toastmaster, called the company to order at

7.50 P.M. He first welcomed the guests in the name of the Institute and welcomed the National President, expressing his gratification at the inauguration of the new chapter. He then introduced the President of the Alumni Association of Sigma Xi of Southern California, Dr. John C. Shedd.

Dr. Shedd expressed the gratification of the Alumni of Sigma Xi at the establishment of the present chapter, stating that it was the realization of a long cherished dream and predicted for the new chapter a brilliant career which would result in the shifting of the center of gravity of scientific research toward the great Southwest of our country.

Dr. Millikan next introduced W. L. Hardin, Ex-President of the Alumni Association of Sigma Xi of Southern California. Dr. Hardin's remarks emphasized the gratification of the Alumni in the founding of the present chapter.

President Millikan next introduced Dr. Dayton C. Miller, National President of the American Physical Society, who in a happy manner spoke of the splendid work being done in Southern California.

Dr. Millikan then introduced Dr. P. Debeye of Zurich, Switzerland, a visiting member of the California Institute staff. Dr. Debeye expressed his pleasure at being present, remarking that it was not strange that there should be an especial attraction toward the center of gravity of scientific work which in the nature of the case he could not resist, hence his presence in Southern California.

The company then adjourned to the auditorium of the Norman Bridge Laboratory of Physics and listened to an able address by Dr. Richtmyer.

Professor E. C. Watson introduced Dr. Richtmyer as Professor of Physics at Cornell University and National President of Sigma Xi.

Dr. Richtmyer in beginning his address expressed the satisfaction of the national society in the founding of the new chapter. He then outlined the history of the society since its founding in 1886 down to the present time, stating that the California Institute Chapter was the forty-third chapter to be installed. He emphasized the fact that Sigma Xi was more than an honorary society in that it was actively engaged in the promotion of research. This is done by the support of research fellowships as well as by the election to membership, not only of undergraduates, but of graduates and alumni members. He then delivered a most interesting address on "Some Aspects of X-Ray Work" basing his discourse upon an historical

INSTALLATION AT THE CALIFORNIA INSTITUTE 55

analysis from the eighties of the last century to the present time. The lecture was illustrated by many experiments, some of them with apparatus furnished for this occasion by the Research Laboratories of the General Electric Company, Schenectady, New York.

JOHN C. SHEDD, *National Sec'y, pro tempore*

SIGMA XI ALUMNI AT SPOKANE

A successful and delightful occasion was the gathering of members of Sigma Xi at breakfast on April 11 in Spokane, Washington. The plan originated with Mr. I. T. Johnsrud, a member of Sigma Xi from the University of Minnesota, who is at present head of the department of physics at the Lewis and Clark High School in Spokane. There were twenty-one present at the breakfast. Five others who were expected found it impossible to come. The following is a list of those who attended the meeting, the chapter each represents and their present occupation:

Name	Chapter	Occupation	Address
Arthur Levine	Minnesota	Chemist	Wash. State College, Pullman
J. M. Raeder	Idaho	Plant Pathologist	Univ. of Idaho, Moscow
F. N. Bast	Kansas	Supt. of Schools	Chokio, Idaho
Ralph Gelbach	Iowa	Chemist	Wash. State College
S. C. Vandecaveye	Ames		Wash. State College
W. H. Ransom	Michigan	Biol. Survey	Spokane, Wash.
W. A. Rockie	Nebraska	Blister Rust Control	Spokane, Wash.
I. T. Johnsrud	Minnesota	Inst. in Physics	Lewis and Clark High School, Spokane, Wash.
M. F. Angell	Wisconsin	Dean of the Col- lege of Science	Univ. of Idaho, Moscow
J. W. Hungate	Cornell	Cheney Normal School	Cheney, Wash.
C. W. Hungerford	Wisconsin		Univ. of Idaho, Moscow
R. O. Hutchinson	Chicago		Wash. State College
A. M. Shaffer	Northwestern	Cheney Normal School	Cheney, Wash.
Thomas M. Dahm	Northwestern	Inst. in Physics	Univ. of Idaho
Mrs. T. M. Dahm			
J. E. Kirkwood	Syracuse	Biologist	Univ. of Montana
C. C. Todd	Chicago	Chemist	Wash. State College
A. L. Melander	Chicago	Biologist	Wash. State College
Wm. T. Stevens	Indiana		Ellensburg Normal Wash.
Edw. C. Johnson	Minnesota	Agronomist	Wash. State College
Thomas Large	Chicago	Zoologist	Spokane, Wash.

A SIGMA XI RESEARCH PRIZE AT THE UNIVERSITY OF VIRGINIA

To encourage scientific research at the University of Virginia, the President and Visitors Research Prize has been established through a gift of Hollis Rinehart, member of the Board of Visitors, in the form of \$100 in gold to be awarded each year for the best original investigation published by a professor or student of the University.

This award is announced each April at the annual meeting of the local chapter of Sigma Xi, the national society for the promotion of research. As far as is known here such a prize is unique among the educational institutions of the United States.

Selection of the winner of the Prize is made by a committee of authorities of which this year Dr. F. K. Richtmyer, National President of Sigma Xi and Professor of Physics at Cornell University, is chairman. The other members of the committee are Dr. R. W. King, of the American Telephone and Telegraph Company of New York, and Dr. H. B. Williams of the College of Physicians and Surgeons of New York.

Heads of each of the scientific departments of the University select the most suitable published research from his department and present it to the committee of Sigma Xi. The prize is not limited to any one field, but is open to investigators in pure and applied science and mathematics. Competition is limited to the schools of astronomy, biology, chemistry, geology, mathematics, physics and to the departments of engineering and medicine.

The first award of this prize was made at the annual meeting of Sigma Xi held in April to Professor Fred Allison, formerly a graduate student at the University of Virginia and now in the State Technical School at Auburn, Alabama, for original work on "The Effective Wave-Length in White-Light Interferometry."

Mr. Rinehart, who has endowed the prize with a generous gift, is one of the most recent members appointed to the Board of Visitors. He is a resident of Albemarle County who has shown himself keenly interested in the development of the University and in the relation between scientific discovery and practical affairs.

Need for such a recognition of original investigation at the University has long been felt, and the organization of the local chapter of Sigma Xi in 1923 followed the appointment of a faculty committee on research. The two bodies co-operating worked out the plan for the President and Visitors Research Prize.

CHAPTER REPORTS

CORNELL

OFFICERS FOR 1925-26

President

W. B. CARVER

Vice-President

LEWIS KNUDSON

Secretary

ROBT. MATHESON

Treasurer

C. C. MURDOCK

During the year the Alpha Chapter of Sigma Xi had three lectures by out-of-town scientists. These were as follows:

Nov. 10, 1924. Dr. H. E. Ives of the Western Electric Company on, "The Transmission of Photographs Over Telephone Wires."

May 4, 1925. Dr. Joseph A. Becker of the Bell Telephone Laboratories on, "Some Thermoionic Characteristics of Vacuum Tube Filaments," with demonstrations.

May 26, 1925. Dr. W. R. Whitney of the General Electric Company on, "Hobbies."

For the first time in several years the chapter held what was called "Research Meetings" at which members gave 15 minute reports on investigations now in progress. Four such meetings were held. The discussions proved very interesting, those attending expressing not only satisfaction with the content and presentation of the reports but feeling also that such meetings were particularly fitting for a group of "Companions in Zealous Research." In all, fifteen reports were given, as follows:

R. M. Holmes, "Illuminating the Moon Element."

R. B. Corey, "The Hydrides of Germanium."

A. H. Wright, "Puzzles of a Frog Hunter."

S. Simpson, "The Thyroid Gland (with motion pictures)."

E. F. Phillips, "The Ecology of a Bee Disease."

W. A. Hurwitz, "The Treatment of Series."

O. F. Curtiss, "How Food is Moved Within a Plant."

C. M. Pendleton, "The Coming Eclipse."

C. H. Myers, "Attempts to Modify Certain Characters in Wheat."

L. A. Maynard, "Stiffness in Swine."

H. B. Adelman, "Cyclopia."

J. M. Sherman, "Studies in Bacterial Growth."

Lewis Knudson, "Germination of Orchid Seeds."

C. M. Nevin, "Recent Investigations of Sands."

A. A. Allen, "The Periodic Disappearance of Birds."

On May 15th was held the annual dinner and initiation. President S. L. Boothroy addressed the chapter briefly on the subject, "Research—A Retrospect," after which the following were initiated as members.

MEMBERS ELECTED

GRADUATE STUDENTS

THOMAS CALDWELL ADAMS, B.S. (Univ. of Utah, 1922) *Geology*

RAYMOND PECK ALLEN, A.B. (C. U.), Assistant in Chemistry

Chemistry

LUDWIG FREDERICK AUDRIETH, B.S. (Colgate), Assistant in Chemistry

Chemistry

RAYMOND WILLIAM BELL, B.S.A. and Ph.D. (Cornell, 1924), Bureau of Dairying, Washington, D. C. *Dairy Industry*

EARL LOUIS BRUNETT, D.V.M. (C. U., 1923), Instructor in Veterinary

Pathology and Bacteriology

J. LOSSING BUCK, B.S. (C. U., 1914), Candidate for M.S.

Agr. Economics and Farm Mgt.

GEORGE JOHN CALISTER, B.S.A. (Ont. Agr. Coll., 1921), Candidate for M.S. *Agronomy*

PAUL JONES CHAPMAN, B.S. (Ore. Agr. Coll., 1922), Instructor in Entomology *Entomology*

KENNETH STEWART COLE, A.B. (Oberlin, 1922), Instructor in Physics

Physics

LAURENCE WARD CORBETT, B.S. (C. U., 1924), Asst. in Veg. Gardening *Veg. Gardening*

JULIAN DANA CORRINGTON, A.B. (C. U., 1913), Ph.D. (C. U., 1925), Professor of Zoology, Univ. of S. Carolina *Zoology and Entomology*

MILES HUGO CUBBON, B.S. (Cornell, 1921), Assistant in Agronomy

Agronomy

LAUCHLIN MACLAURIN CURRIE, M.A. (Davidson Coll.), Fellow in Chemistry

Chemistry

JOSEPH ALMA DYE, A.B. (Brig. Young Univ., 1916), Instructor in Physiology

Medical College

JOHN SUTLIFF FONDA, B.Chem. (C. U.), Assistant in Chemistry

Chemistry

ROBERT LEWIS HANSON, A.B. (Oberlin, 1922), Instructor in Physics

Physics

DAVID GRAAFF HAYLETT, B.S. (Ill. Univ., 1922), M.S. (Ill., 1923),
Assistant in Botany Botany

CHARLES HENRY JOHNSON, M.A. (Univ. of Washington), Assistant
in Chemistry Chemistry

JOHN PAUL JONES, B.S. (Maryland Univ.), M.S. (Maryland U.,
1921), Asst. Prof. Agronomy, Mass. Agr. College, Candidate for
Ph.D. Botany

JOHN CALVIN KELLER, B.S. (Colgate), Assistant in Chemistry
Chemistry

GEORGE ABDALLAH KNAYSI, B.S.A. (C. U., 1924), Candidate for
M.S. Dairy Industry

ROBERT DONALD LEWIS, B.S. (Penn State, 1919), Instructor in
Plant Breeding Plant Breeding

CHUNG LO LIU, B.S.A. (Cornell, 1922), Graduate Student *Entomology*

JOHN RUSTIN ALFRED McMILLAN, B.S.A. (U. of Sydney, Australia,
1924), Graduate Student Plant Breeding

RUSSEL C. MILLER, B.S.A. (Penn State, 1922), Research Asst. in
Animal Husbandry Animal Husbandry

ELIZABETH FALLEN MÖLLER, A.B. (Goucher Coll., 1921), A.M.
(Clark, 1922), Ph.D. (C. U., 1924), Honorary Fellow in Psychology
Psychology

MERVYN CHARLES MOSSOP, B.S.A. (Cornell, 1924), Instructor in
Entomology Entomology

HERBERT JOHN PACK, B.S. and M.S. (Utah Agr. Coll.), Instructor
in Biology Entomology

WILLIAM MASON PHIPPS, B.S.A. (Univ. of Ken., 1923), M.S.A.
(Cornell, Feb., 1925), Asst. in Agronomy until Feb., 1925 *Agronomy*

MARIUS PETER RASMUSSEN, B.S. and Ph.D. (Cornell, 1924), Asst.
Prof. Agr. Ec. and Farm Mgt. Agr. Ec. and Farm. Mgt.

ERNEST GUY ROBINSON, B.S. (C. U., 1920), M.S. (C. U., 1925),
Instr. in Geol. until Feb., 1925 Geology

VICTOR FERDINAND TAPKE, B.S.A. (Ohio S. U., 1924), on leave from
Bureau of Plant Industry. Graduate Student Plant Pathology

JOHN WILLIAM THEN, A.B. (C. U., 1922), Candidate for Ph.D.
Physics

RAFAEL ANDRÉS TORO, B.S.A. (Univ. Porto Rico), Asst. Pathologist,
Insular Exp. Sta., Porto Rico, on leave; Graduate Student
Plant Pathology

DAVID WOOLSEY TRAINER, JR., B.S. (Dartmouth, 1921), M.S.
(Northwestern, 1923), Assistant in Geology Geology

EDMUND ELLSWORTH VIAL, B.S. (Univ. of Ill., 1922), M.S. (C. U., 1924), Instructor in Agr. Ec. and Farm Mgt.

Agr. Ec. and Farm Mgt.

STIRLING WATERMAN, B.S.A. (Ont. Agr. Coll., 1921), Candidate for M.S.

Agronomy

WILLIAM ALLEN WATKINS, A.B. (Okla., 1922), M.S. (Okla., 1923), Instructor in Geology

Geology

FREDERICK PATTISON WEAVER, B.S. (Penn State, 1914), M.S. (C. U., 1923), Instructor in Agr. Ec. and Farm Mgt.

Agr. Ec. and Farm Mgt.

LAVERNE HAROLD WILLISFORD, B.S. (Colgate), Assistant in Chemistry

Chemistry

FRANCIS HENRY WILSON, B.S.A. (C. U., 1923), Candidate for M.S.

Entomology

UNDERGRADUATES

FRANK CHITTENDEN FLETCHER *Entomology*

HAROLD ADLARD LOVENBERG, Assistant in Chemistry *Chemistry*

DONALD T. RIES, B.S.A. (Cornell, 1925), Instr. Entomology, Mich. Agr. College *Entomology*

CARLISLE SCHADE *Chemistry*

ADALYN FLORENCE SCHOENFELD *Pathology and Bacteriology*

ROBERT H. VOLGENAU, Asst. in Histology *Comp. Pathology and Bacteriology*

UNIVERSITY RESEARCH STAFF

CHRISTINE MARIE BERKHOUT, Ph.D. (Utrecht, Holland, 1923), Heckscher Research Assistant *Plant Pathology*

MICHIGAN

OFFICERS ELECTED FOR 1925-1927

President EDWARD M. BRAGG

Vice-President HARRISON M. RANDALL

Secretary GEORGE M. EHLLERS

Treasurer ALBERT B. PECK

J. H. EHLLERS, *Retiring Secretary.*

MEETINGS

November 20, 1924. Public lecture by Professor S. Lawrence Bigelow. Subject, "Atoms" from a Chemo-Physical Standpoint.

January 9, 1925. Public lecture by Professor Howard B. Lewis.
Subject, "Insulin."

March 26, 1925. Public lecture by Professor Louis C. Karpinski.
Subject, "Mapping the Great Lakes."

March 26, 1925. Business meeting of the Chapter.

April 30, 1925. Annual initiation and banquet and election of
officers for the ensuing two years.

INITIATES

MEMBERS ELECTED

FACULTY

NORMAN F. MILLER	<i>Obstetrics and Gynocology</i>
WALTER AUGUST VER WIEBE	<i>Geology</i>
ADVANCED FROM ASSOCIATES TO MEMBERS	
RUTH CECILIA WANSTROM	<i>Assistant Professor of Pathology</i>
ADELBERT FORD	<i>Psychology</i>
JOHN MILTON HOVER	<i>Botany</i>
SEIICHI IZUME	<i>Physiol. Chem.</i>
JOHN ERNEST KOTILA	<i>Botany</i>
DAVID WONCHUL LEE	<i>Astronomy</i>
BIRD RICHARD STEPHENSON	<i>Physics</i>
LLOYD ACKERMAN	<i>Zoology</i>
WILLIAM ANDREW ARCHER	<i>Botany</i>
WERNER E. BACHMANN	<i>Chemistry</i>
FRANCES NAOMI CLARK	<i>Zoology</i>
WILLIAM JAMES CLENCH	<i>Zoology</i>
HARRY WILBUR HANN	<i>Zoology</i>
MELVILLE HARRISON HATCH	<i>Zoology</i>
JAMES PAUL JONES	<i>Zoology</i>
JAMES LYLE KASSNER	<i>Chemistry</i>
AARON LEVIN	<i>Electrical Engineering</i>
ARTHUR IRVING ORTENBURGER	<i>Zoology</i>
JOHN C. PERNET	<i>Chemistry</i>
WALTER MALCOLM SIMPSON	<i>Pathology</i>

ASSOCIATES ELECTED

GRADUATES

CARLTON ELBERT BURNSIDE	<i>Botany</i>
MIN SHAO CHANG	<i>Geology</i>
CLIFFORD COOK FURNAS	<i>Chemical Engineering</i>

ARTHUR JOHN GOOD
 ELISHA S. GURDJIAN
 JENNINGS RUSH HICKMAN
 THOMAS HUXLEY LANGLOIS
 ADELIA McCREA
 J. W. HOLLYWOOD MONAWECK
 ROBERT BURGOYNE NEWCOMBE
 EDWARD HARNER POTTHOFF
 THEODORE CHRISTIAN SCHNEIRLA
 WILLIAM HERMAN STOKES
 KWAN YAU TANG
 RICHARD EMORY TOWNSEND
 GEORGE BENSON WATKINS
 ROBERT KIRBY WINTERS
 SHELBY WILLIAM WISHART
 YI FANG WU

Chemical Engineering
Anatomy
Zoology
Zoology
Botany
Chemical Engineering
Geology
Chemical Engineering
Psychology
Ophthalmology
Electrical Engineering
Chemical Engineering
Chemical Engineering
Forestry
Cardiology
Zoology

UNDERGRADUATES

AXEL FLOYD LEROY ANDERSON
 JOSEPH ANTON BARKOVICH
 LUDLOW FREY BEACH
 CHARLES CANA DRISCOLL
 FRANKLIN LELAND EVERETT
 WALDO KARL GREINER
 ORRA MILLER HENDERSON
 STEWART HARDING HULSE
 CHARLES LOUIS HULSWIT
 GEORGE FREDERICK KEIPER, JR.
 CLIFFORD CHARLES McARTHUR
 FRANK LACHLAN McPHAIL
 WALTER OTTO MENGE
 ROBERT JAMES MINARD
 SEWARD ALGER WARNER
 RICHARD RANDOLPH WHIPPLE

Mechanical Engineering
Electrical Engineering
Mechanical Engineering
Electrical Engineering
Mechanical Engineering
Civil Engineering
Pathology
Mechanical Engineering
Electrical Engineering
Pharmacology
Mechanical Engineering
Int. Medicine
Mathematics
Civil Engineering
Electrical Engineering
Electrical Engineering

MISSOURI

During the past year the Missouri Chapter carried out its program of regular monthly meetings of both social and intellectual activities. This included four luncheon meetings for discussion or business, and seven for scientific lectures.

For the lectures, the Chapter was fortunate in obtaining men outside of the immediate institution through visiting scientists and exchange lectures with the Kansas Chapter and with the group of Sigma Xi men at the School of Mines at Rolla. The exchange lectures have proved successful enough to warrant the continuation of the practice. The lectures were as follows:

Sept. 22, 1924, "The Chemical Bases of the Fertility of the Soil," by Dr. H. J. Page, Rothamsted Agricultural Experiment Station, Harpenden, England.

Sept. 22, 1924, "Biological Investigations in Agriculture," by Dr. D. W. Cutler, Rothamsted Agricultural Experiment Station, Harpenden, England.

Sept. 23, 1924, "The Microörganisms of the Soil and Their Relationships," by Dr. D. W. Cutler, Rothamsted Agricultural Experiment Station, Harpenden, England.

Sept. 23, 1924, "The Chemistry of Crop Production," by Dr. H. J. Page, Rothamsted Agricultural Experiment Station, Harpenden, England.

Nov. 10, 1924, "The Mineral Resources of Missouri," by H. A. Buehler, Missouri State Geologist, Rolla, Missouri.

Dec. 2, 1924, "Surveying the Grand Canyon of the Colorado," by Dr. R. C. Moore, Geologist, University of Kansas, Lawrence, Kansas.

Jan. 27, 1925, 4 P.M., "Research in X-Ray" and 8 P.M., "What We See With the X-Ray," by Dr. F. K. Richtmyer, National President of Sigma Xi and Professor of Physics, Cornell University, Ithaca, N. Y.

In order to give some social touch to the Chapter activities, the business of the Chapter was handled at luncheon meetings. These meetings proved popular.

The Chapter roll contained the names of eighty-two active members and seventeen associates. There were added in the last election the names of seventeen as members and twenty-six as associates including the following:

MEMBERS ELECTED

FACULTY

CHAS. W. TURNER, B.S. in Agr., 1919; A.M., 1921, Assistant Professor *Dairy Husbandry*

GRADUATES

CARL DEUBER, A.B., A.M., University Fellow	<i>Botany</i>
LEONARD W. GADDAM, B. S. in Eng., University Fellow	<i>Chemistry</i>
NOLLIE B. GUERRANT, A.B.	<i>Agricultural Chemistry</i>
FREDRICK MCKENZIE, A.M., 1923	<i>Animal Husbandry</i>
JOSEPH P. FOLTZ, B.S. in Eng., 1924; Electrical Engineer, Eng. Exp. Station	<i>Electrical Engineering</i>
HORACE W. WOOD, JR., B.S. in Eng.	<i>Civil Engineering</i>
BENJAMIN H. FRAME, B.S. in Agr.	<i>Farm Management</i>
KENNETH GORDON, A.B., 1924	<i>Zoology</i>
JAMES W. GRAHAM, Field Crops, B.S. in Agr. 1923, A.M. 1924	<i>Genetics</i>
J. E. HUNTER, B.S. in Agr., 1924	<i>Agricultural Chemistry</i>
JAMES HARVEY JENNITT, A.M., 1924	<i>Preventive Medicine</i>
W. W. JOHNSTON, B.S. Scholar, College of Agr.	<i>Soils</i>
I. A. KEYTE, B.Pd., M.Pd., B.S. in Education	<i>Geology</i>
ELMER B. POWELL, B.S. in Agr.	<i>Assistant in Soils</i>
JOSEPH C. STEPHENS, B.S. in Agr., 1924; Agricultural Scholar	<i>Field Crops</i>
C. W. WEBER, B.S. in Agriculture, 1924	<i>Dairy Husbandry</i>

ASSOCIATES

JOHN QUINCY ADAMS, A.B., 1923; A.M., 1925	<i>Geology and Geography</i>
ALBY G. ANDERSON, B.S. in Agr.; A.M., 1925	<i>Hort. and Entomology</i>
LOREN T. BYERS, B.S. in Eng., 1925	<i>Electrical Engineering</i>
LESLIE C. CASE, A.B., 1924; A.M., 1925	<i>Geology and Geography</i>
WILLIAM DEYOUNG, B.S. in Agr.	<i>Soils</i>
ERWIN C. ELTING, B.S. in Agr., 1923	<i>Dairy</i>
DONALD GLASSMAN, A.B., 1924; A.M., 1925	<i>Geology and Chemistry</i>
WAVERLY P. HAYES, B.S. in Agr., 1923; A.M., 1925	<i>Dairy</i>
HARLAN D. HIBBARD, Senior	<i>Physics and Mathematics</i>
JANE HICKMAN, A.B., 1925	<i>Zoology and Chemistry</i>
RUBY HIGHTOWER, Graduate	<i>Mathematics and Astronomy</i>
W. D. KELLER, Graduate A.B., 1925	<i>Geology and Chemistry</i>
ROBERT E. JOHNSON, B.S. in Eng., 1925	<i>Electrical Engineering</i>
RICHARD V. LOTT, B.S. in Agr., 1925	<i>Hort. and Entomology</i>
GERALD MADDOX, B.S. in Ed., 1924; A.M., 1925	<i>Geology</i>
A. K. MILLER, A.B., 1924; A.M., 1925	<i>Geology and Economics</i>
LOUIS J. NEEDELS, A.B., 1925	<i>Anatomy and Physiology</i>
T. M. NELSON, A.B., 1924; A.M., 1925	<i>Geology and History</i>

EDWIN NEWTON, A.B., 1923; A.M., 1925	<i>Chemistry Physiol.</i>
ANDREW C. NORWINE, B.S. in Eng., 1924; E.E., 1925	<i>Electrical Engineering</i>
DONALD F. ROBERTSON, A.B., 1925	<i>Zoology and Chemistry</i>
RICHARD D. SHEWMAKER, Senior	<i>Mathematics and Chemistry</i>
THEO. W. SVOBODA, A.B., 1924; A.M., 1925	<i>Chemistry</i>
EDWIN F. TRUNK	<i>Mechanical Eng. and Eng. Drawing</i>
MAX VAN HORN, A.M., 1925	<i>Botany</i>
ZELLA VON GREMP, A.B., 1925	<i>Chemistry and Physics</i>

The Missouri Chapter succeeded in arousing the interest of the members in the Society on the staff of the Missouri School of Mines and the State Department of Geology. These two departments contain fifteen members and associates in the Society who have decided to affiliate with the Missouri Chapter. With improved transportation between Columbia and Rolla it is hoped that they may become an integral part of this Chapter.

For the ensuing year the following officers were elected:

President, DEAN E. J. McCUSTLAND
Vice-President, DR. ADDISON GULICK
Secretary, DR. H. J. HOOKER, JR.
Treasurer, PROF. E. S. HAYNES

The year was closed with a joint luncheon with Phi Beta Kappa as part of the commencement week program, with Dean Isador Loeb, formerly Dean of the School of Commerce, as the principal speaker. It was a fitting close of another year of good growth by this Chapter.

W. A. ALBRECHT, *Secretary.*

ILLINOIS

During the year the chapter held eight regular and one special meetings with an average attendance of 80. In all except the special meeting, refreshments were served at the close during the social period. The list of speakers and their subjects follows:

- Oct. 18, "Texas Bird Studies," A. R. Cahn.
- Nov. 19, "Madagascar," John Stansfield.
- Dec. 17, "Positive and Negative Valences," W. A. Noyes.
- Jan. 21, "The Philippines," A. R. Kienholz.
- Feb. 25, "The Franciscan Mission Architecture of Alta, California," Rexford Newcomb.

Mar. 18, "Food Infection and Food Poisoning," F. W. Tanner.
 Apr. 15, "Present Status of Intelligence Tests," E. H. Cameron.
 Apr. 24, Joint meeting with Phi Beta Kappa Society. "Some Biological Aspects of Democracy, Dr. M. F. Guyer, University of Wisconsin."
 May 6, "The Tornado of Southern Illinois," W. O. Blanchard.
 Business Meeting—Election of Members.
 May 13, Initiation, Business Meeting, Election of Officers, Address of Retiring President.

OFFICERS ELECTED FOR 1925-26

<i>President</i>	ROGER ADAMS
<i>Vice-President</i>	REXFORD NEWCOMB
<i>Secretary</i>	W. H. RAYNER
<i>Treasurer</i>	L. E. CARD

MEMBERS OF THE BOARD OF ELECTORS

W. B. McDougall	<i>Literature, Arts and Science</i>
H. M. CASE	<i>Agriculture</i>
F. E. RICHART	<i>Engineering</i>

NEW MEMBERS

Elected Dec. 6, 1924

FACULTY

FRANK BOLTON ADAMSTONE	<i>Zoology</i>
BRUCE WILLET BENEDICT	<i>Mechanical</i>
FRED ALEX. DAVIDSON	<i>Dairy Husbandry</i>
GEORGE T. FELBECK	<i>Linde Air Products Co.</i>
DAVID LEWIS FISKE	<i>Railway Engineering</i>
KARL H. W. KLAGES	<i>Agronomy</i>
ROY ALLEN SHIVE	<i>Chemistry</i>
JOHN BRADSHAW TAYLOR	<i>Chemistry</i>
WILLIAM FEAGAN TULEY	<i>Chemistry</i>

ASSOCIATES

VERNON MARTIN ALBERS	<i>Physics</i>
HUGO WILLIAM ALBERTZ	<i>Agronomy</i>
DOROTHY EMMA BATEMAN	<i>Chemistry</i>
LAWRENCE J. BOWDITCH	<i>Mechanical Engineering</i>
FERRIS BERTRAND CRUM	<i>Chemistry</i>
MARGARET DANN	<i>Chemistry</i>

EDWARD D. DEVEREUX	Bacteriology
DOROTHY GAIL ENGLE	Chemistry
HUGH FISHER HALL	Dairy Husbandry
JOSEPH B. HAWKES	Botany
GLEN SEFTON HIERS	Chemistry
JESSE WILLIAM HUCKERT	Mechanical Engineering
ARNIM DEAN HUMMELL	Physics
WILLIAM R. KING, JR.	Chemistry
ROB ROY McGREGOR	Chemistry
MARY V. MILLIGAN	Botany
RALPH H. OJEMANN	Chemistry
NICHOLAS A. PETTINGER	Agronomy
RUSSELL SPURGEON POOR	Geology
CHAS. W. RIPPIE	Chemistry
LLOYD THOMPSON SANDBORN	Chemistry
ELLWOOD W. SCARRITT	Chemistry
NORMAN MCKEE STOVER	Chemistry
HERLUF HALDAN STRANDSKOV	Botany
MARGARET C. JACOBS	Botany
ARCHIE M. McMaster	Engineering Physics
JULIUS MULLER	Mechanical Engineering
ADOLPH PABST	Geology
BENJAMIN E. TWITCHELL	Chemistry

Elected May 6, 1925

MEMBERS FROM FACULTY

LAWRENCE TRACY BROWN	Physiology
MASON HERBERT CAMPBELL	Agriculture
JUSTA MORRIS LINDGREN	Chemistry
ROY ANDREW NELSON	Physics
ALBERT ERNEST R. WESTMAN	Ceramic Engineering

MEMBERS FROM GRADUATE SCHOOL

HOWARD C. ABBOTT	Botany
HUGO W. ALBERTZ	Agronomy
THEODORE BENNETT	Mathematics
IRVING HILL BLAKE	Zoology
HUBERT B. BRAMLET	Chemistry
EDWARD M. BRICKETT	T. and A. M.

WALLACE REED BRODE	<i>Chemistry</i>
COURTLAND L. BUTLER, JR.	<i>Chemistry</i>
ROBERT MERLE CORBIN	<i>Chemistry</i>
ALFRED L. DIXON	<i>Chemistry</i>
SAMUEL EDDY	<i>Zoology</i>
HAROLD JOHN EIGENBRODT	<i>Zoology</i>
FREDRICK EARL EMERY	<i>Physiology</i>
ARCHIBALD E. GREY	<i>Chemistry</i>
FLOYD DAVID HAGER	<i>Chemistry</i>
JAMES M. HARDESTY	<i>Civil Engineering</i>
FRANK HOVARKA	<i>Chemistry</i>
RICHARD W. JACKSON	<i>Chemistry</i>
MAYNARD S. JOHNSON	<i>Zoology</i>
GEORGE M. KERANEN	<i>Civil Engineering</i>
SHEO-LI	<i>Chemistry</i>
HAROLD W. MANTER	<i>Zoology</i>
ROBERT M. MATHEWS	<i>Mathematics</i>
JUSTUS F. MULLER	<i>Zoology</i>
SIDNEY L. NEAVE	<i>Chemistry</i>
RUTH W. RYAN	<i>Botany</i>
MORRIS STEGGERDA	<i>Zoology</i>
FLORENCE DELL STOUDER	<i>Chemistry</i>
ALFRED PAUL THOMPSON	<i>Chemistry</i>
FREDERICK E. VANDAVEER	<i>Chemistry</i>
HAROLD E. WESSMAN	<i>Civil Engineering</i>
NINA ADELLA WICKS	<i>Zoology</i>
JOHN WIERDA	<i>Chemistry</i>
PAUL ALLEN YOUNG	<i>Botany</i>

ASSOCIATES

JAMES A. ARVIN	<i>Chemistry</i>
CLARA M. BAILEY	<i>Botany</i>
JAMES B. BALL	<i>Agriculture</i>
ANTON BRANDTZAEG	<i>T. and A. M.</i>
AUBREY E. BRODERICK	<i>Chemistry</i>
ERDVY L. CARMICHAEL	<i>L. A. and S.</i>
FRANCIS M. CLARK	<i>Agronomy</i>
FRANCIS WEST COOKE	<i>Physics</i>
EVE YPIN DANIELS	<i>Botany</i>
RALPH DOUGLAS DOVER	<i>Mathematics</i>

THOMAS DeVRIES	Chemistry
ALBERT L. ELDER	Chemistry
LYLE W. FINLEY	Mathematics
LLOYD P. GARNER	Electrical Engineering
LOUIS GERBER	Chemistry
PAUL DeWITT HANCE, JR.	Electrical Engineering
ROBERT W. HART	Mathematics
HAROLD N. HAYWARD	Electrical Engineering
MELVIN HENDERSON	Animal Husbandry
BESSIE LEE HENRY	Botany
ALBERT E. HERSHY	Mechanical Engineering
RUSSELL H. LANDER	Agriculture
WILLIAM D. LANSING	Chemistry
ROBERT T. LESLIE	Chemistry
WILBUR MARSHALL LUCE	Zoology
HERBERT A. LUNT	Agronomy
WILLARD L. McEWEN	Chemistry
LEWIS H. McROBERTS	Chemistry
WALTER M. MILLER	Mathematics
LOUISE E. MILLHOUSE	Home Economics
WALTER L. MOORE	Mathematics
JOHN S. MORREL	Mathematics
NELLIE FERN MORRIS	Mathematics
EDWIN DeBOSE MORISON	Mathematics
LUELLA L. MUELLER	Botany
KENNETH HAYES MYERS	Economics
JAMES W. NECKERS	Chemistry
FRANKLIN C. NELSON	Entomology
FERRIS L. OSBORN	Chemical Engineering
CORNELIA T. OSSEWAARDE	Botany
ALVAH L. PEARSALL	Entomology
ROBERT C. ROSS	Economics
GEORGE A. SALEE	Agriculture
TACEY M. SAVAGE	L. A. and S.
LAURA J. SCHROEDER	Botany
GEORGE R. SHERWOOD	Chemistry
PARKE HARVEY SIMER	Zoology
WILHELM G. SOLHEIM	Botany
WAYNE DWIGHT STALEY	Chemical Engineering
RALPH H. TALBOT	Chemical Engineering

RUTH EMMA TUCKER
 LEWIS McDONALD TURNER
 ESTHER UTZIG
 WILLIAM H. VAUGHAN
 GEORGE H. VERNON
 RICHARD LOCKWOOD WEBB
 EVERETT ELMER WEHR
 JOHN E. WHITTENBERG
 WARDEN FORSYTH WILSON
 HAROLD KIRBY WILSON
 MARGARET WINDSOR

<i>Home Economics</i>
Botany
Geology
Ceramic
Chemistry
Zoology
Zoology
Chemical Engineering
General Engineering
Agronomy
Entomology

THE SIGMA XI CLUB OF OKLAHOMA 1924-25

The membership of the Sigma Xi Club of Oklahoma has been growing steadily. This year we have twenty-nine members who are on the faculty of the University, three members who are wives of faculty Sigma Xi Club members, and two other members who reside in the city but who are not now connected with the University. These bring the total resident membership up to thirty-four. Twelve members of Sigma Xi, residing in Oklahoma but not in our city, have joined our Club.

This year we already held six regular meetings at which the following papers were presented.

November 20, 1925. Dr. H. L. Dodge (Physics), "The Design and Operation of the *DODGE DESIGN* Rheostat."

December 11, 1924. Dr. Bruce Houston (Chemistry), "Synthetic Hypnotics."

January 15, 1925. Dr. A. O. Weese (Zoology), "The Effect of Environmental Conditions on Rate of Development."

February 19, 1925. Dr. C. E. Decker (Geology), "Studies in Minor Folds and Faults."

March 19, 1925. Prof. W. E. Bruner (Botany), "The Influence of Different Habitats on Oats, Wheat and Barley."

May 7, 1925. Prof. F. W. Padgett (Chemistry), "Chemistry of the Hydrocarbons."

On February 14 was held the Annual Sigma Xi Club dinner at which Dr. Archibald Henderson of the University of North Carolina was the speaker.

W.M. SCHRIEVER, Secy.-Treas.

THE SIGMA XI CLUB OF WYOMING

The officers for the present year are as follows:

President, A. F. VASS

Vice-President, PHILO F. HAMMOND

Secretary-Treasurer, E. B. PAYSON

These men, in order, represent the following chapters: Cornell, Leland-Stanford, and Washington University of St. Louis.

JOHN W. SCOTT, *Prof. of Zoology and Research Parasitologist.*

THE SIGMA XI CLUB OF NEW YORK UNIVERSITY

The Sigma Xi Club of New York University held its second meeting at Washington Square on the evening of March 25th. The speaker of the evening was Dr. Ancel St. John, who has for many years been studying X-ray phenomena. The title of the address was "The X-ray in Industrial Research." The first part of the address dealt with the application of the X-ray to determine flaws in metals and the conditions of time of exposure, voltage, etc., which determined the possibilities and limitations. Instances were shown by slides, of its use in the Watertown Arsenal and elsewhere. The rest, and major part of the lecture, was devoted to the determination of X-ray wave lengths and their application to the study of crystalline structures. The discussion covered the possible extension of X-ray analysis to other fields of industry. The meeting was attended by representatives of the three chief centers of University work, from University Heights, The Medical School and Washington Square.

JOSEPH W. ROE.

REPORT OF COMMITTEE OF AWARD OF SIGMA XI AID TO RESEARCH

The Committee of Award of the funds subscribed by alumni and made available for the year 1925-26 by the Executive Committee has decided upon the following awards:

PROFESSOR MARSTON T. BOGERT, COLUMBIA UNIVERSITY, \$500

The money will be used to employ a part time assistant for work on the study of the connection between physiological effect and chemical constitution in the Cinchophen (Atophan) group.

PROFESSOR BRUCE FINK, MIAMI UNIVERSITY, OXFORD, OHIO, \$300

The money will be used in the preparation of material for a comprehensive manual on the lichens. Miami University matches the gift with an equal amount.

PROFESSOR CHARLES J. LYON, DARTMOUTH COLLEGE, \$90

The money will be used to secure translation rights of Kostytschew's "Pflanzenatmung."

DR. CHESTER K. WENTWORTH, STATE UNIVERSITY OF IOWA, \$200

The money will be used for the construction and operation of a machine to set up in uniform shape certain mechanical analyses of geological sediments which will result in photographing and assembling about one thousand such analyses.

DR. CARL D. LARUE, UNIVERSITY OF MICHIGAN, \$100

The money will be used for assistance in investigating the genetics of fungi.

W. R. WHITNEY, *Director of Research, General Electric Co.*

E. L. THORNDIKE, *Columbia University*

JOHN H. NORTHRUP, *Rockefeller Institute for Medical Research*

CONTRIBUTIONS TO THE ALUMNI FUND SINCE THE LAST PUBLISHED
LIST

Name	Chapter	Address
Abrahamsen, H. L.	Yale	St. John, N. B.
Adson, Alfred W.	Nebraska	Rochester, Minn.
Affelder, H. F.	Case	Cleveland, Ohio
Agersborg, Dr. H. P. E.	Illinois	Decatur, Illinois
Alexanderson, E. F. W.	Union	Schenectady, N. Y.
Allen, Ezra	Pennsylvania	Collegeville, Pa.
Allen, Howard G.	Cornell	Niagara Falls, N. Y.
Allen, Kenneth	Rensselaer	New York, N. Y.
Alling, Charlotte S.	Northwestern	Worcester, Mass.
Allison, M. F.	Purdue	Kokomo, Indiana
Allyn, Harriett M.	Chicago	New London, Conn.
Allyn, Orr M.	Illinois	Clinton, Ill.
Arnold, Earl L.	Cornell	Rochester, N. Y.
Atlee, John L.	Pennsylvania	Lancaster, Pa.
Babel, Herman	Yale	Pittsburgh, Pa.
Bachman, Rowland W.	Pennsylvania	Attleboro, Pa.
Baer, Mervin K.	Michigan	Chicago, Ill.
Bahr, George	Columbia	New York, N. Y.
Baker, Carl I.	Cornell	New York, N. Y.

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Baker, Hugh P.	Syracuse	New York, N. Y.
Baldwin, Wesley M.	Cornell	Albany, N. Y.
Ball, E. F.	Cornell	Pittsburgh, Pa.
Ballantyne, Norman F.	Cornell	Ottawa, Canada
Ballard, Dr. Edith L.	Cornell	Bay St. Louis, Missouri
Ballard, William S.	Illinois	Washington, D. C.
Bareuther, Charles A.	Pennsylvania	Philadelphia, Pa.
Barker, C. W. T.	Rensselaer	Troy, N. Y.
Barker, Dr. L. F.	Chicago	Baltimore, Maryland
Barnes, R. M.	California	Berkeley, Calif.
Barnhill, John F.	Kansas	Ypsilanti, Michigan
Barr, John H.	Cornell	Ithaca, N. Y.
Barrow, Elva	Chicago	Ferrum, Va.
Barry, James M.	California	Birmingham, Ala.
Barth, Ernest A.	Columbia	New York, N. Y.
Bartley, Elias H.	Cornell	Brooklyn, N. Y.
Baruch, Edgar	California	Los Angeles, Calif.
Beahan, Willard	Cornell	Cleveland, Ohio
Beber, M.	Nebraska	Omaha, Nebr.
Beck, George E.	Yale	Briar Cliff Manor, N. Y.
Beckett, B. B.	Cornell	Palo Alto, Calif.
Behre, C. Edward	Yale	Amherst, Mass.
Behre, Illinois H.	Chicago	Baton Rouge, La.
Beinecke, F. W.	Yale	Cranford, New Jersey
Bellis, Horace D.	Yale	Trenton, New Jersey
Bench, Alfred R.	Illinois	High Bridge, New Jersey
Benedict, Harris M.	Nebraska	Cincinnati, Ohio
Bethke, Mrs. William	Minnesota	Chicago, Ill.
Bierbaum, Christopher H.	Cornell	Buffalo, N. Y.
Bissell, Robert W.	Univ. of Washington	Pittsburgh, Pa.
Black, Homer S.	Case	Glen Ridge, New Jersey
Blake, Mrs. Abigail K.	Cornell	Champaign, Ill.
Bjorge, Oscar	Minnesota	Portland, Oregon
Bloomer, Frank F.	California	Berkeley, Calif.
Bliss, Carl E.	Case	Gloucester, N. J.
Blumenthal, Philip L.	Yale	Buffalo, N. Y.
Boardman, Leland J.	Cornell	Houghton, N. Y.
Boeck, Dr. W. C.	California	Boston, Mass.
Booge, J. E.	Iowa	Wilmington, Delaware
Bowing, Dr. H. H.	Pennsylvania	Rochester, Minn.
Bowman, Dr. H. H. M.	Pennsylvania	Toledo, Ohio
Boyer, L. R.	Michigan	Chicago, Ill.
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Braun, Annette F.	Ohio	Cincinnati, Ohio
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Bumpus, Herman C.	Brown	Duxbury, Mass.
Burbank, Luther	Stanford	Santa Rosa, Calif.
Bureau, Norman V.	Pennsylvania	Audobon, New Jersey
Burnham, G. B.	California	Reno, Nevada
Burnett, Jerome B.	Nebraska	Maracaibo, Venezuela
Burton, H. E.	Iowa	Washington, D. C.
Burwash, Edward M. J.	Chicago	Vancouver, B. C.
Bushnell, Leland	Kansas	Manhattan, Kansas
Bushnell, Samuel K.	Yale	Philadelphia, Pa.
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Cameron, Walker S.	Columbia	New York, N. Y.
Campbell, Dr. John E.	Minnesota	South St. Paul, Minn.
Capron, William C.	Cornell	Anaconda, Mont.
Carle, N. A.	Stanford	Newark, N. J.
Carollo, Bert J.	Rensselaer	Rock Springs, Wyo.
Carples, V. H.	Columbia	New York, N. Y.
Carter, Effie A.	Cornell	Brooklyn, N. Y.
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Chapman, James E.	Minnesota	Agricultural College, N. D.
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Clark, Lee H.	Cornell	Rosemont, Pa.
Clark, Rollin M.	Pennsylvania	Washington, D. C.
Clark, Thomas S.	Cornell	New York, N. Y.
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Cline, James W., Jr.	Yale	Seattle, Wash.
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Collens, Clarence L.	Yale	Cleveland, Ohio
Conover, Archie R.	Union	Amsterdam, N. Y.
Copeland, Lyman F.	Worcester	Denver, Colo.
Corbett, Harvey W.	California	New York, N. Y.
Cowling, Donald J.	Yale	Northfield, Minn.
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Creighton, E. E. F.	Union	Schenectady, N. Y.
Crew, Maurice C.	Illinois	Chicago, Ill.

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Cutler, Herbert J.	Michigan	Buffalo, N. Y.
Dalstrom, Oscar F.	Rensselaer	Chicago, Ill.
Darbaker, J. M.	Michigan	Wellsville, Ohio
Darby, Edward H.	Union	Rome, N. Y.
Darlington, H. T.	Chicago	East Lansing, Mich.
Darrow, L. H.	Michigan	New York, N. Y.
Darrow, Raymond C.	Michigan	Brooklyn, N. Y.
Darrow, Wirt E.	Michigan	New York, N. Y.
Davis, Cassius M.	Union	Schenectady, N. Y.
Davis, Dr. D. J.	Illinois	Chicago, Ill.
Davis, Dr. John Staige	Yale	Baltimore, Md.
Davenport, H. L.	Union	Schenectady, N. Y.
Dawson, Bernard H.	Michigan	La Plata, Argentina
Day, R. N.	Minnesota	New Orleans, La.
Day, W. J.	Cornell	Schenectady, N. Y.
Dean, Ernest W.	Yale	Westfield, New Jersey
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de la Motte, Bro. Luke	California	Mary Knoll, N. Y.
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Diack, Archibald W.	Michigan	Ann Arbor, Mich.
Dickson, Dr. John M.	Pennsylvania	Gettysburg, Pa.
Dewey, Edward W.	Union	Atlantic, N. J.
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Dorr, A. W.	Michigan	Jackson, Mich.
Doss, G. J.	California	Schenectady, N. Y.
Doty, John W.	Rensselaer	New York, N. Y.
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Durfee, Charles G.	Yale	San Francisco, Calif.
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Gallagher, Francis E.	Cornell	Troy, N. Y.
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Gardner, Willard	California	Logan, Utah
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Gilpin, Francis H.	Pennsylvania	Summit, N. J.
Girvin, Fred	Union	Schenectady, N. Y.
Gladding, Ernest K.	Worcester	Buffalo, N. Y.
Goldbaum, Jacob S.	Pennsylvania	Philadelphia, Pa.
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Gordon, C. H.	Nebraska	Knoxville, Tenn.
Gore, Thomas L.	Pennsylvania	Washington, D. C.
Gorham, L. Whittington	Yale	Albany, N. Y.
Gow, Esther Allen	Iowa	Mills College, Calif.
Graham, Mrs. Helen T.	Chicago	St. Louis, Mo.
Graves, Arthur R.	Rensselaer	Bethlehem, Pa.
Graves, Robert C.	Rensselaer	Hartford, Conn.
Gray, L. J.	Cornell	Pittsburgh, Pa.
Green, Herlwyn R.	Pennsylvania	Palo Alto, Calif.
Green, Wyman R.	Kansas	Chattanooga, Tenn.
Greene, Albert Emerson	Michigan	Ann Arbor, Mich.
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Guest, Herbert H.	Yale	East Hartford, Conn.
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Hailes, William D.	Rensselaer	Rochester, N. Y.
Hailman, J. D.	Rensselaer	Pittsburgh, Pa.
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Hall, E. Snell	Chicago	Jamestown, N. Y.
Hall, Richard P.	California	Houston, Texas
Hall, Roy Holmes	Missouri	Denver, Colo.
Hamilton, Edward P.	Rensselaer	New York, N. Y.
Hamilton, Stuart McC.	Michigan	Boston, Mass.
Hammond, Edward S.	Yale	Brunswick, Maine
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Hanigan, Thomas E.	Union	Schenectady, N. Y.
Hansen, Paul	Illinois	Chicago, Ill.
Hanson, A. N.	Iowa	Decorah, Iowa
Harrington, George T.	Chicago	Greenwich, Conn.
Harrington, John C.	Kansas	Kansas City, Mo.
Hart, R. Phillip	Yale	Cazenovia, N. Y.
Hartupee, H. W.	Iowa	Des Moines, Iowa
Hatch, T. A.	Yale	New Rochelle, N. Y.
Hayes, Samuel P.	Cornell	South Hadley, Mass.
Hayes, Stanley W.	Cornell	Richmond, Indiana
Hazlett, Olive C.	Chicago	South Hadley, Mass.
Healy, Edwin S.	Cornell	Bloomfield, N. J.
Hejinian, Lucea M.	Chicago	Anamosa, Iowa

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Helfman, John	Michigan	Detroit, Mich.
Henderson, Harold	Michigan	Detroit, Mich.
Henry, T. S.	Illinois	Kalamazoo, Mich.
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Higley, G. O.	Michigan	Delaware, Ohio
Hildreth, Dr. E. R.	Cornell	Bay Shore, N. Y.
Hill, E. R.	Cornell	New York, N. Y.
Hilton, David	Nebraska	Lincoln, Nebr.
Hilton, W. A.	Cornell	Claremont, Calif.
Hitch, Lola S.	Northwestern	Philadelphia, Pa.
Hitchcock, Fanny R. M.	Pennsylvania	Warwick, N. Y.
Hitchcock, Henry S.	Yale	Woodbury, Conn.
Hoadley, George A.	Pennsylvania	Swarthmore, Pa.
Hoakley, Mrs. Z. Pauline	Michigan	Midland, Mich.
Hodous, Louis W.	Case	Cleveland, Ohio
Hogan, Edward L.	Michigan	Detroit, Mich.
Holliger, Dr. C. D.	California	Stockton, Calif.
Hooker, Elon H.	Cornell	New York City
Hopkins, Dr. Ross	Kansas	Jefferson City, Missouri
Horn, Adam J.	Union	St. Johnsville, N. Y.
Howard, James L.	Yale	Hartford, Conn.
Howe, Ernest	Yale	Litchfield, Conn.
Howe, Anna M.	Cornell	New Orleans, La.
Howk, Dr. Horace J.	Michigan	Mt. McGregor, N. Y.
Hoyt, Henry C.	Union	New York, N. Y.
Hubbard, George D.	Cornell	Oberlin, Ohio
Huebotter, H. A.	Purdue	W. Lafayette, Indiana
Hufnagel, F. B.	Cornell	Sewickley, Pa.
Hulett, F. E.	Case	East Cleveland, Ohio
Hume, Dr. Edward H.	Yale	Changsha, China
Humphreys, E. S., Jr.	Union	La Grange, Ill.
Huntington, Albert H.	Cornell	St. Louis, Mo.
Huston, Ralph C.	Iowa	East Lansing, Mich.
Huxley, F. R.	Minnesota	Faribault, Minn.
Ide, Francis P.	Cornell	Springfield, Ill.
Illmer, Louis	Cornell	Cortland, N. Y.
Irwin, D. D.	Yale	Bisbee, Arizona
Israel, Albert H.	Columbia	New York, N. Y.
Isbell, W. T.	Michigan	Herculaneum, Mo.
Ives, Judson D.	Chicago	Pine Bluff, N. C.
Jaros, Mrs. Ernest S.	Cornell	Columbus, Ohio
Jennings, H. S.	Michigan	Baltimore, Md.
Jensen, J. A.	Pennsylvania	Philadelphia, Pa.
Jenckes, Marcien	Yale	Cambridge, Mass.
Jewett, Mrs. Fannie F.	Chicago	Short Hills, N. J.
Johann, Norma E.	Columbia	New York, N. Y.
John, August Jr.	Union	Schenectady, N. Y.

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Johnston, Harold E.	Cornell	Troy, N. Y.
Jones, Lloyd B.	Cornell	Harrisburg, Pa.
Jones, L. R.	Wisconsin	Madison, Wisconsin
Jordan, David Starr	Cornell	Stanford University, Calif.
Judson, Everett	Michigan	Buffalo, N. Y.
Kaestner, Albert C.	Columbia	New York, N. Y.
Kahl, P. Hugo	Kansas	Pittsburgh, Pa.
Katz, S. H.	Ohio	Pittsburgh, Pa.
Kay, Edgar B.	Union	Washington, D. C.
Keeler, R. F.	Michigan	Zeeland, Mich.
Keen, Dr. W. W.	Brown	Philadelphia, Pa.
Kelley, Floyd C.	Union	Schenectady, N. Y.
Kelley, Frederick W.	Cornell	Albany, N. Y.
Kempton, F. E.	Illinois	Washington, D. C.
Kenyon, Otis A.	Cornell	Greenwich, Conn.
Keyes, Mrs. C. F.	Minnesota	Minneapolis, Minn.
Keyes, Elizabeth L.	Cornell	Claremont, Calif.
Kindle, E. M.	Cornell	Ottawa, Canada
King, Mrs. Estella C.	Cornell	New York, N. Y.
King, Robert W.	Cornell	New York, N. Y.
Kinsella, Ralph A.	Washington Univ.	St. Louis, Mo.
Kirkham, William B.	Yale	Springfield, Mass.
Kitson, Mrs. Harry D.	Chicago	Appleton, Wisconsin
Kleinsorge, Dr. R. E.	Iowa	Silverton, Oregon
Koch, Gustav H.	Rensselaer	Wilkinsburg, Pa.
Koessler, Jessie H.	Chicago	Chicago, Ill.
Kolb, Robert P.	Rensselaer	Bethlehem, Pa.
Koller, L. R.	Cornell	New York, N. Y.
Kranz, W. G.	Cornell	Cleveland, Ohio
Kraus, Edgar	Columbia	Enid, Okla.
Kreisinger, Henry	Illinois	New York City
Kronig, Dr. Ralph DeL.	Columbia	Copenhagen, Denmark
Kuh, William H.	Chicago	Chicago, Ill.
Laist, Frederick	California	Anaconda, Mont.
Lake, Gleason C.	Chicago	Washington, D. C.
Landacre, W. A.	Ohio	Chula Vista, Calif.
Landers, Charles S.	Yale	New York, N. Y.
Landreth, Olin H.	Union	New York, N. Y.
Landreth, William B.	Union	Schenectady, N. Y.
Lane, Frederick W.	Yale	Philadelphia, Pa.
Large, S. Robert	Yale	Bristol, Conn.
Lauer, Arnold W.	Yale	Tulsa, Oklahoma
Lauterhahn, Otto	Rensselaer	Paterson, N. J.
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Lazier, Edgar L.	California	Portland, Oregon
Learned, Albert P.	Kansas	Kansas City, Mo.

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Little, Walter C., Jr.	California	Wilmington, Calif.
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Lockwood, E. H.	Yale	New Haven, Conn.
Lomb, Henry C.	Cornell	New York, N. Y.
Long, Maurice B.	Nebraska	Glen Ridge, N. J.
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Loudon, Dr. John P.	Michigan	Yakima, Wash.
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Lowry, Eleanor C.	Nebraska	Lincoln, Nebr.
Ludy, Albert K.	Pennsylvania	Tucson, Arizona
Luke, Captain Ittai A.	Kansas	Presque Isle, Maine
Lyder, E. E.	Kansas	Elko, Nevada
Lyman, James	Cornell	Evanston, Ill.
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Mackenzie, Andrew N.	Stanford	Los Angeles, Calif.
Mackenzie, Dr. Marion	Pennsylvania	W. Philadelphia, Pa.
Mackay, Scott	Rensselaer	Milwaukee, Wis.
Malleis, O. O.	Kansas	Pittsburgh, Pa.
Manning, Russell C.	Case	Bombay, India
Marcusson, Henry W.	Case	Cleveland, Ohio
Markle, Gordon M.	Yale	Chicago, Ill.
Marshall, Ruth	Nebraska	Rockford, Ill.
Maxwell, George W.	Michigan	Ypsilanti, Mich.
McArthur, Dr. M. W.	Yale	Chicago, Ill.
McAvoy, Blanche	Ohio	Muncie, Indiana
McCabe, Gordon B.	Michigan	Detroit, Mich.
McClelland, John R.	Yale	New Haven, Conn.
McConnell, I. W.	Cornell	New York, N. Y.
McConnell, R. E.	Columbia	New York, N. Y.
McCord, Dr. Clinton P.	Pennsylvania	Albany, N. Y.
McCracken, George L.	Cornell	Swarthmore, Pa.
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McMunn, Richard L.	Illinois	Urbana, Ill.
McNall, Jessie J.	Michigan	Potsdam, N. Y.
Mead, Harold T.	Chicago	New Orleans, La.
Meader, Percy D.	Brown	Baltimore, Md.
Means, Karl S.	Chicago	Houghton, Mich.

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Millard, Floyd H.	Colorado	St. Louis, Mo.
Miller, D. H.	Yale	Cannondale, Conn.
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Miller, Ward L.	Chicago	Grove City, Pa.
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Minor, Mrs. Alice E.	Iowa	Mason City, Iowa
Mitchell, Helen S.	Yale	Battle Creek, Mich.
Mitchell, James F.	Cornell	Lake Charles, La.
Mohler, Bruce M.	Ohio	Washington, D. C.
Mohr, Franklin	Northwestern	New York, N. Y.
Monical, Doska W. E.	Colorado	Long Beach, Calif.
Monroe, C. J.	Chicago	Rolla, Mo.
Moodie, Roy L.	Illinois	Chicago, Ill.
Morgan, S. O.	Union	Princeton, N. J.
Morrison, Charles E.	Columbia	New York City
Morse, W. C.	Ohio	A. and M. College, Miss.
Moss, Sanford A.	Cornell	West Lynn, Mass.
Mossycop, William A.	Cornell	Brooklyn, N. Y.
Mott, William E.	Cornell	Pittsburgh, Pa.
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Mudge, William A.	Union	Huntington, W. Va.
Mueser, E. E.	Columbia	Mountain Lakes, N. J.
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Nakaseko, Rokuro	Yale	Kyoto, Japan
Navias, Louis	Illinois	Schenectady, N. Y.
Neal, George A.	Kansas	Philadelphia, Pa.
Needles, Theodore S.	Ohio	Cleveland, Ohio
Newell, Lyman C.	Brown	Boston, Mass.
Nichols, Henry J.	Yale	Washington, D. C.
Nichols, W. W.	Yale	New York, N. Y.
Niles, Dr. Byron D.	Michigan	Lansing, Mich.
Noll, E. E.	Iowa	Joliet, Ill.
Norton, Harold F.	Cornell	Newport News, Va.
Norton, W. H.	Iowa	Mt. Vernon, Iowa
Nyquist, Harry	Yale	New York, N. Y.
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